

# WORKSHOP ON MEDIA STREAMING MEETS 5G

Portland, Dec 9-10, 2019

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**Tencent America** 

**DASH-IF President** 

### **SCHEDULE**

- Workshop Sessions:
  - Monday, Dec 9: 1 PM-6 PM
  - Tuesday, Dec 10: 9 AM -1 PM
- Networking Event: Monday, Dec 9, 7:00 PM- 8:30 PM
- DASH-IF IOP Pre-Meeting: Dec 10, 2PM 6PM
- DASH-IF 22<sup>nd</sup> Regular Meeting: Dec 11, 9PM DEC 12, 5PM



# PROGRAM-1 (MONDAY)

12.30	Registration
1.00	Welcome (Iraj Sodagar, Tencent)
	Introductory Talks (30 mins + 10 mins questions)
1.10	Overview of 5G Systems and Technology (Thomas Stockhammer, Qualcomm)
1.50	Overview of User Studies/Analysis (Amir Gomroki, Ericsson)
	Deep Dives (5 mins introduction plus 25 mins interactive discussion)
2.30	New codecs (Thierry Fautier, Harmonic)
3.00	Coffee
3.30	Content-Aware Encoding (Yuriy Reznik, Brightcove)
4.00	Low-Latency streaming challenges and opportunities (Nicolas Weil, AWS Elemental)
4.30	Impact of new protocols (Ali Begen, Comcast)
5.00	Ingest technologies (Imed Bouazizi, Qualcomm)
5.30-6.00	Ad Insertion (Iraj Sodagar, Tencent)
7.00-8.30	Networking event at Rouge Hall

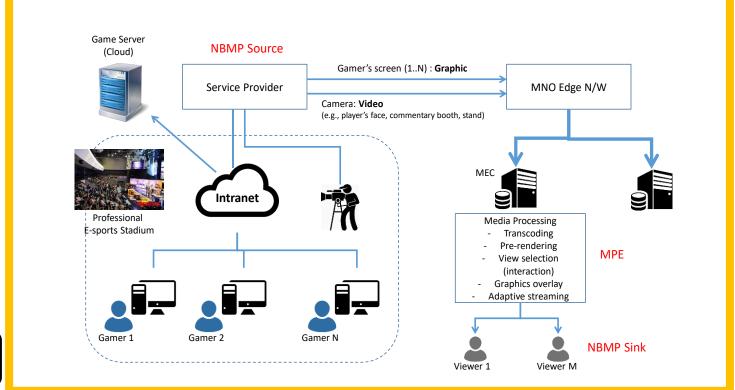


# PROGRAM-2 (TUESDAY)

8.30	Coffee
	Introductory Talk (30 mins + 10 mins questions)
9.00	Overview of latest Media Streaming Developments ( <u>John Simmons, Microsoft</u> )
	Deep Dives (5 mins introduction plus 25 mins interactive discussion)
9.40	Content Protection (Laurent Piron, Nagra)
10.10	Coffee
10.30	Broadcast/multicast and hybrid delivery (Thomas Stockhammer, Qualcomm)
11.00	Cloud computing, edge computing, and media on cloud (Imed Bouazizi, Qualcomm)
11.30	AR/VR/MR and other interactive applications ( <u>Thierry Fautier, Harmonic</u> , Emmanuel Thomas)
12.00	Device platform diversity and hybrid DASH/HLS (Cedric Thienot, Enesys)
12.30-1.00	Workshop Summary (Iraj Sodagar, Tencent)



# 5G E-Sports Streaming





### Mission & Goal

- Goal: Identify the challenges and possible gaps for fully taking advantage of 5G networks for multimedia streaming and related applications
- Approach: Let's discuss the real issues rather than listen to presentations
  - 1. Ask the hard questions
  - 2. Bring up the real challenges
  - 3. Pose possible (technical and non-technical) opportunities



## WIFI access & Group Notes

- WIFI:
  - access point: Guest
  - password: BrokenWires@@2019
- Google Doc:
  - <u>http://tinyurl.com/dash-if-5g</u>
  - All participants are welcomed to add their comments in real time during the discussion.



## Thanks to...

- Organizing Committee
  - Per Fröjdh
  - Thomas Stockhammer
  - Will Law
  - Nicolas Weil
  - John Simmons
  - Thierry Fautier
  - Angela Hardy
  - Iraj Sodagar

- Our Host
  - AWS Elemental
    - · Nicolas Weil





## Networking Event: Rouge Hall @7PM

Address: The Vue Apartments, 1717 SW Park Ave, Portland, OR 97201





